

CONSULTANT

PROJECT

Mixed-Use
Development

LOCATION
Lawrence, KS

PROJECT NUMBER
31398000

ISSUE RECORD
PLANNING 11.01.2018
PLANNING 01.02.2019

DATE
11.01.2018
PROJECT MANAGER
Mark Winschel
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REGISTRATION

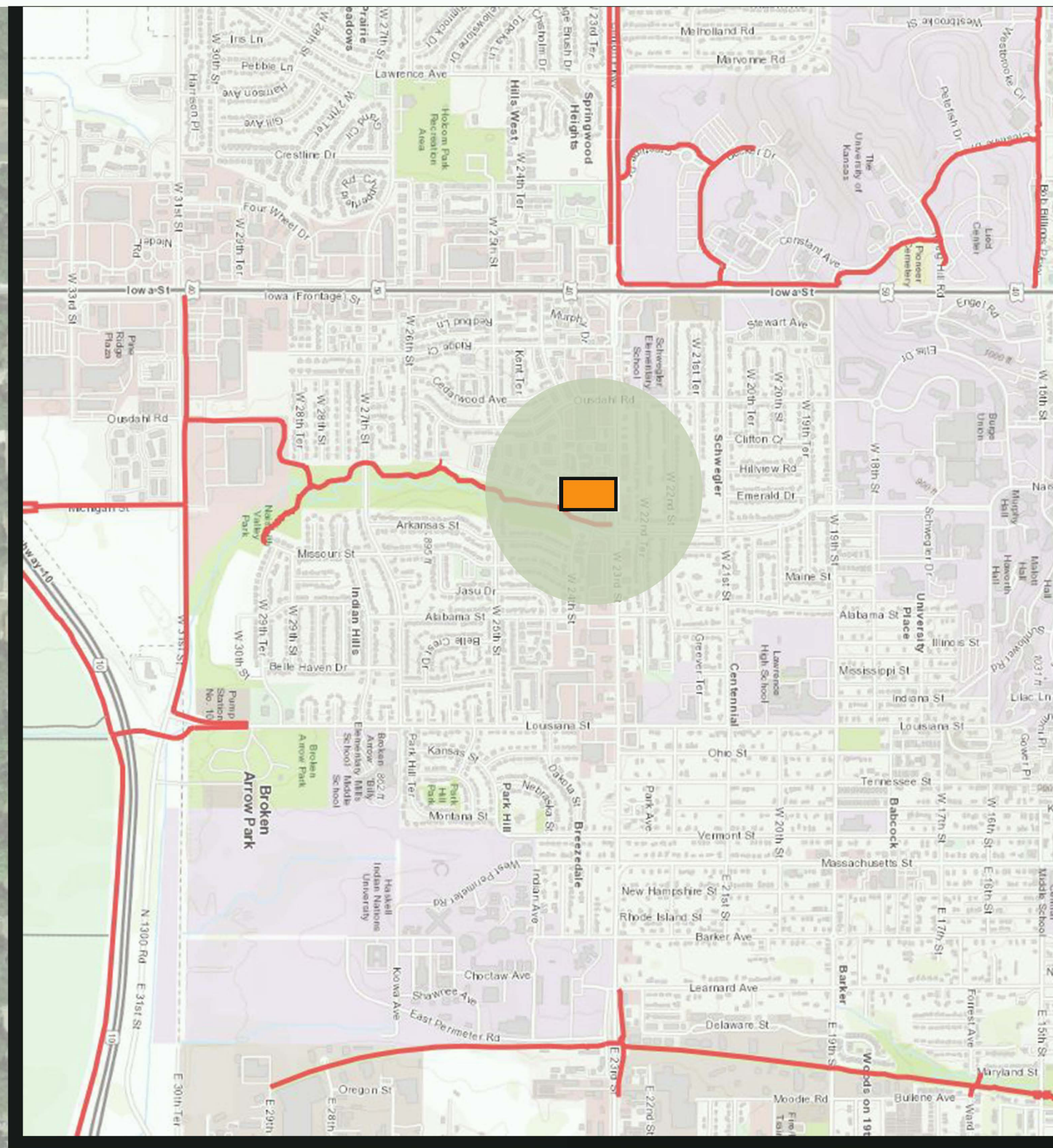
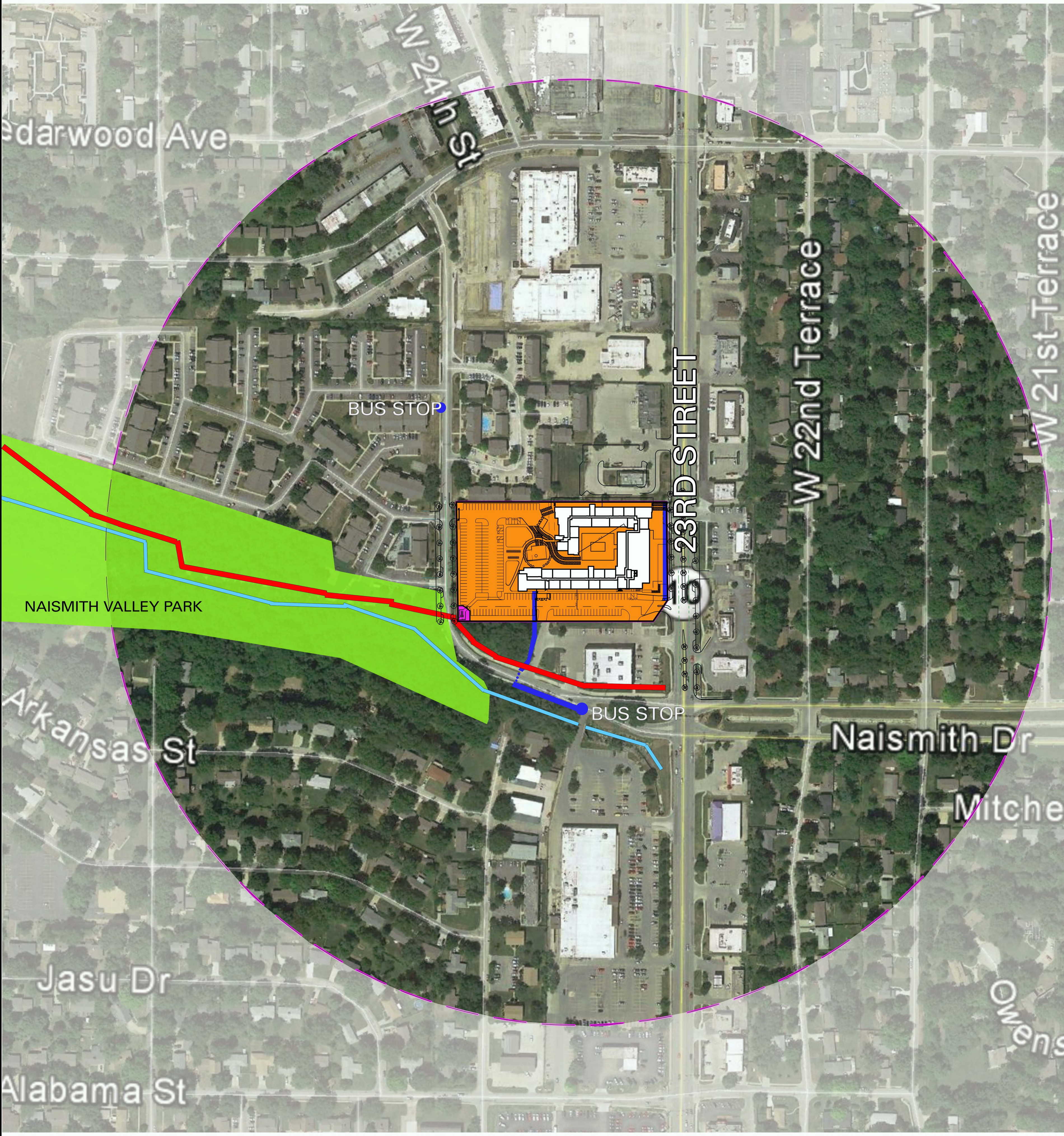
SHEET TITLE
AERIAL
VICINITY VIEW

SHEET NUMBER

A0



Google earth



THE T-ZONES ARE ALLOCATED IN RESPONSE TO EXISTING CONDITIONS AND ARE STRUCTURED AROUND PEDESTRIAN SHEDS

- T5 URBAN CENTER
- HIGHER INTENSITY W/ MIXED USE AND SIGNIFICANT RETAIL. THISZONE IS WHAT WE THINK OF AS MAIN STREET.
- CIVIC SPACE
- WATER FEATURE
- NEIGHBORHOOD PEDESTRIAN SHED: 5 MINUTE WALK
- WALK/BIKE TRAIL
- WALK/BIKE "OASIS STATION"
- THIS STATION IS PROVIDED AS PART OF THE T5 DEVELOPMENT AS A CIVIC AMENITY
- THIS AREA INCLUDES RAINGARDEN
- CONNECTIVITY DEDICATE 4' TO 23RD STREET PROPERTY LINE FOR FUTURE INCREASE WALK-BIKE SIDEWALK
- NEW SIDEWALK CONNECTING TO NAISMITH BUS STOPS & NEIGHBORING RESIDENTIAL AREAS

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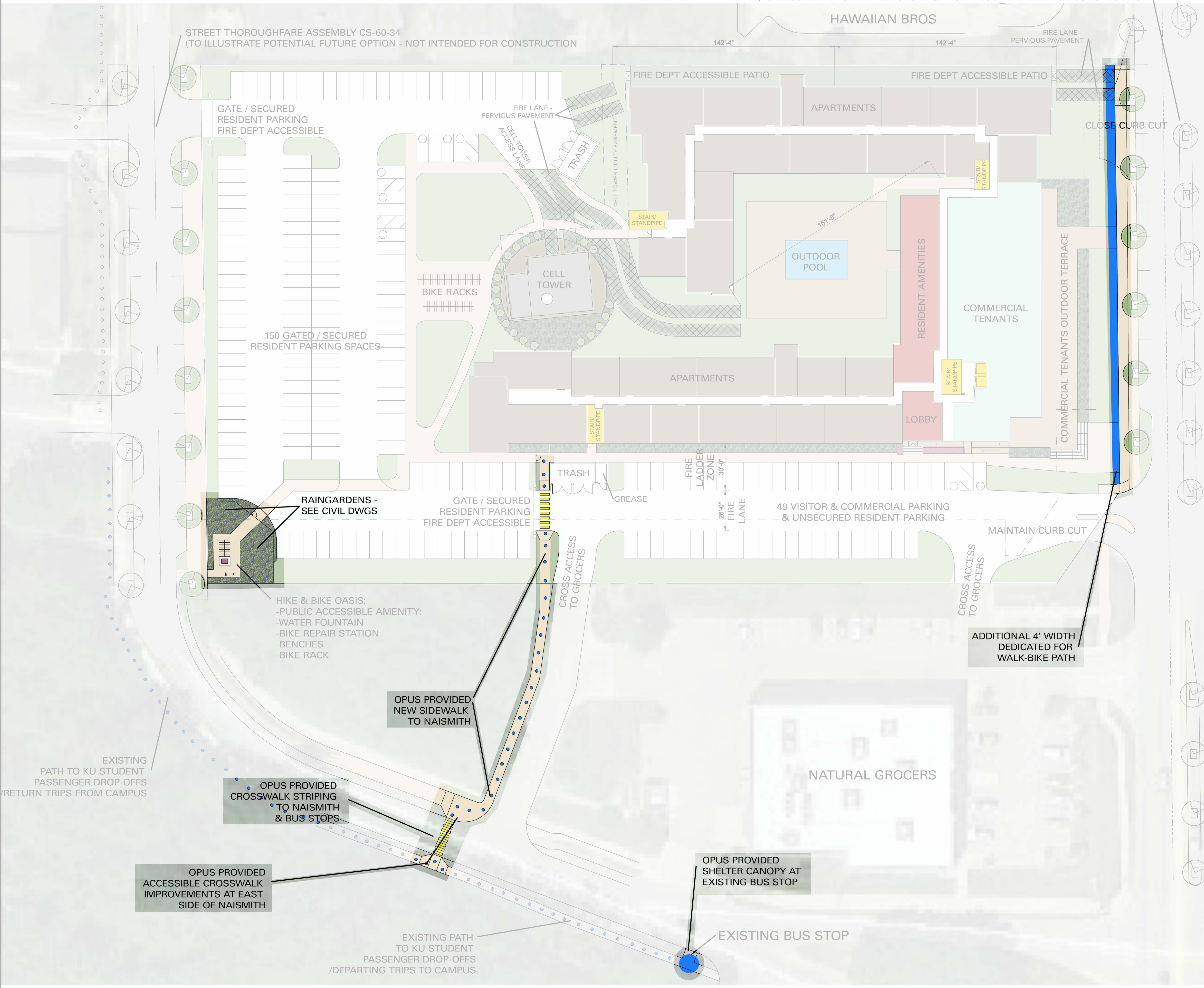
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STREET THOROUGHFARE ASSEMBLY AV-90-56
(TO ILLUSTRATE POTENTIAL FUTURE OPTION - NOT INTENDED FOR CONSTRUCTION)

STREET THOROUGHFARE ASSEMBLY CS-60-34
(TO ILLUSTRATE POTENTIAL FUTURE OPTION - NOT INTENDED FOR CONSTRUCTION)



Transect Zones Summary	Required	Provided
Allocation of Zones		
TND		yes
Minimum Base Density		
Residential	24u/Ac Min.	27u/Ac
Other Functions	30% min	42.19%
Block Size		
Block Perimeter	2000' max	1924'
Public Frontages	55, AV, CS, BV	
Curb	Raised 5-20" R	yes
Walkway	12-20"	yes
Planter	Cont. 4-6"	yes
Civic Spaces		
Green, Square, Plaza		Link to Trail
Lot Occupation		
Lot Width	150' Max	273.75'
Lot Coverage	80% Max	70%
Building Disposition		
Front Setback	0-12' max	39.5'-49.6'
Side Setback West	0-12' max	6.6'-14.6'
Side Setback East	0-12' max	83.2'-90'
Rear Setback	3' min	169.2'
Building Type		
Sidewalk	yes	yes
Rearyard	yes	yes
Parking Layout		
First Layer	no	yes*
Second Layer	warrant	yes
Third Layer	yes	yes
Priority Frontages		
Shopfront & Awning	yes	yes
Gallery	yes	yes
Building Height		
	2-5 stories	3 stories
Building Function		
Residential	yes	yes
Office	yes	yes
Retail	yes	yes
Area Calculations		
Site Area		4.44 Ac
Building Area		141,194 sf +/-
Number of Units		119
Retail Area		8,682 sf +/-
Parking Calculations		
Apts Code Requirement		119
Amount in Excess		53
Subtotal Apts		172
Retail at 1/3000 sf		27
Total Parking		199
Design Standards		
Storefront Glass	70% min	72%
Openings Above 1st Floor	40% Max	40% max

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CITY COMM 02.15.2019
CITY COMM 02.26.2019

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SEE CIVIL DRAWINGS FOR COMPLETE DIMENSIONING, EASEMENTS, & DETAILS

SHEET TITLE
SITE LAYOUT

0 15 30 60
SHEET NUMBER

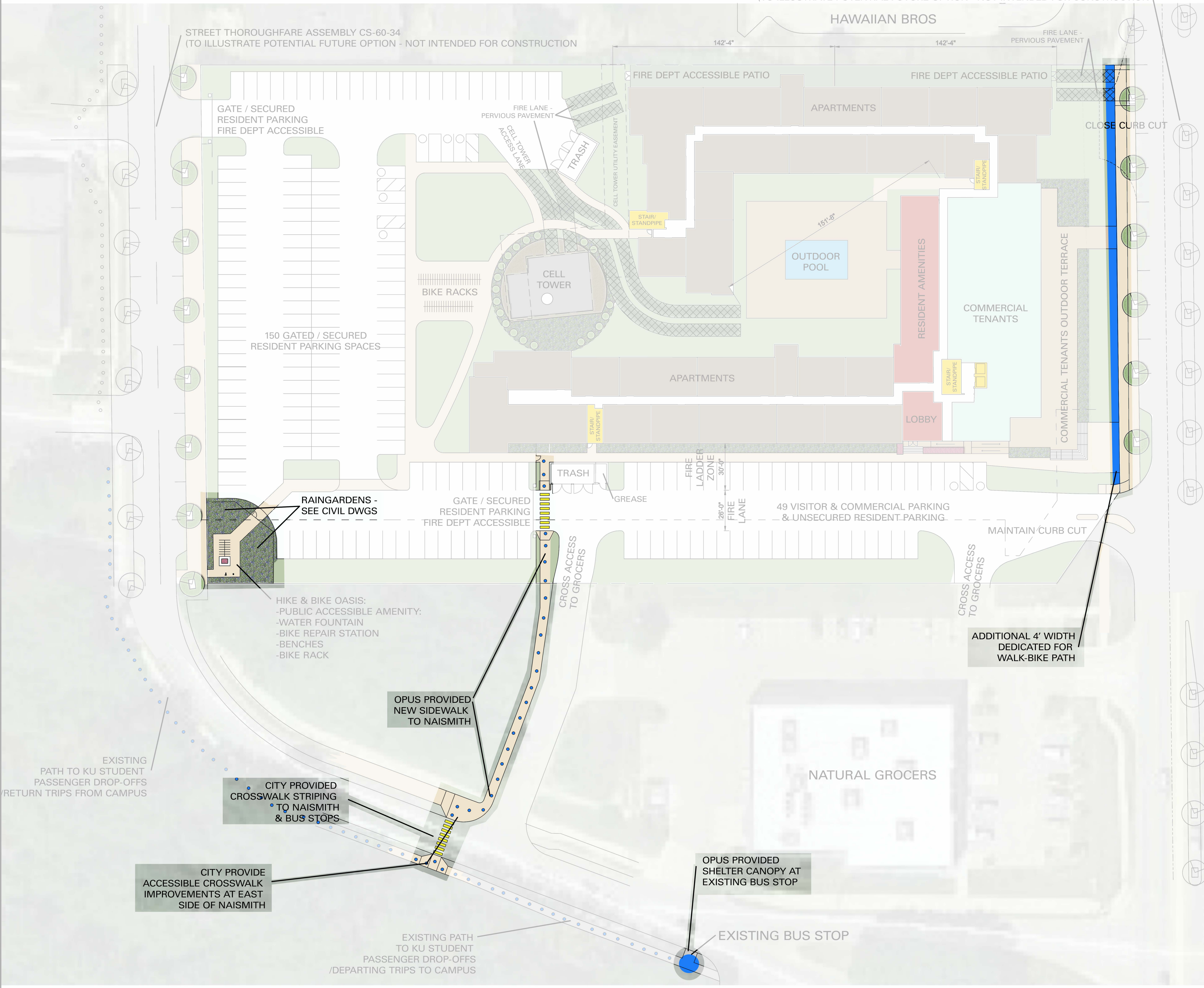
PLAN NORTH

HIGHLIGHTED CHANGES PER PLANNING COMMISSION COMMENTS **AS.1**

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SHEET TITLE
EXTERIOR
OVERVIEW

SHEET NUMBER

A3.0

EXISTING CELL TOWER
BRICK
CEMENT BOARD SIDING & TRIM
LIMESTONE VENEER



A3.1.1 WEST ELEVATION

GALVALUME METAL SIDING
STUCCO ACCENT



A3.1.2 SOUTH ELEVATION

STUCCO ACCENT AT BUILDING "BLADE" SIGNAGE / I.D.
WHITE METAL COMPOSITE PANEL RETAIL SIGNBAND CANOPY
COMMERCIAL TENANT TERRACE



A3.1.3 NORTH ELEVATION

APARTMENT LEASING OFFICE ENTRANCE
STUCCO ACCENT



A3.1.4 EAST ELEVATION

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SHEET TITLE

EXTERIOR
ELEVATIONS

SHEET NUMBER

CHAPTER 8: INTERIOR FINISHES				
TABLE 803.11 - INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY (SPRINKLERED)				
GROUP	EXIT ENC/PAS	CORRIDORS	ROOMS	
A-3	B	B	C	C
B / M	B	C	C	C
R-2	C	C	C	C
NOTES				

CHAPTER 9: FIRE PROTECTION SYSTEMS	
NOTES	
1. BUILDING IS FULLY SPRINKLERED PER NFPA 13	
2. SINGLE AND MULTIPLE STATION SMOKE ALARMS REQUIRED PER 907.2.11.2	
3. EMERGENCY VOICE / ALARM COMMUNICATION SYSTEM THROUGHOUT PER SEC. 907.5.2.2 AND NFPA 13	
4. PORTABLE FIRE EXTINGUISHERS REQUIRED PER FIRE CODE	
5. DWELLING UNITS TO HAVE CAPABILITY TO SUPPORT VISIBLE ALARM NOTIFICATION APPLIANCES PER ANSI A117.1 CHAPTER 10	

CHAPTER 10: MEANS OF EGRESS	
NOTES	
SEE SHEET A0.1 FOR OCCUPANCY GROUPS, OCCUPANT LOAD CALCULATIONS, MEANS OF EGRESS CALCULATIONS, AND REQUIRED EXIT DOORS	
1009.2.1	ACCESSIBLE MEANS OF EGRESS AN ELEVATOR IS NOT REQUIRED TO COMPLY WITH AN ACCESSIBLE MEANS OF EGRESS
1009.8	TWO-WAY COMMUNICATION REQUIRED AT FLOORS OTHER THAN L1
1005.3	MEANS OF EGRESS CAPACITY FACTOR: - STAIRWAYS: 0.2" PER OCCUPANT WITH EMERGENCY VOICE / ALARM COMMUNICATION SYSTEM - OTHER EGRESS COMPONENTS: 0.15" PER OCCUPANT WITH EMERGENCY VOICE / ALARM

CHAPTER 29: PLUMBING SYSTEMS	
LOCATION	PROVIDED FIXTURES
L1 LOBBY	(1) UNISEX W/ LAVATORY
L1 FITNESS / SPA	
NOTES	
1. THE INDIVIDUALS THAT WILL BE USING THE AMENITY SPACES THROUGHOUT THE BUILDING WILL PRIMARILY BE THE TENANTS OF THE BUILDING. THESE INDIVIDUALS WILL GENERALLY RETURN TO THEIR RESPECTIVE APARTMENTS TO USE THEIR OWN PLUMBING FIXTURES.	

ENERGY CODE	
SECTION	DESCRIPTION
2012 IECC WITH MUNICIPAL CODE ARTICLE XIV, SECTION 18-367	2012 IECC CHAPTER 4, SECTION C401.2 APPLICATION (1) ASHRAE 90.1-2010 ASHRAE 90.1-2010 4.2.1.1 COMPLIANCE PATH NEW BUILDINGS- SECTION 11
TABLE C301.1	SECTION 11.1.4 ENERGY COST BUDGET METHOD COMPLIANCE (a-c) CLIMATE ZONE 4A

GENERAL NOTES	
1 THE FLOOR SURFACES ON BOTH SIDE OF A DOOR SHALL NOT VARY BY MORE THAN 1/2 INCH. THE ELEVATION SHALL BE MAINTAINED ON BOTH SIDES OF THE DOORWAY FOR A DISTANCE NOT LESS THAN THE WIDTH OF THE WIDEST LEAF, PER IBC SEC. 1010.1.7	
2 ALL EGRESS DOORS SHALL BE OPERABLE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT PER IBC SECTION 1010.1.9.	
3 ALL EXIT SIGNS SHALL BE VISIBLE AND SHALL HAVE DESIGNATED EMERGENCY CIRCUITS WITH LOCK OUT DEVICES, IN ACCORDANCE WITH NFPA.	
4 FIRE DEPARTMENT LOCK BOX SHALL BE PROVIDED AS DIRECTED BY THE FIRE DEPARTMENT	
DEFERRED SUBMITTALS	
1 LEVEL ONE RESIDENTIAL LOBBY AND AMENITY AREA INTERIOR DESIGN AND BUILD-OUT	
2 AMENITY POOL/SPA DETAILS AND SUBMITTALS	
3 TENANT IMPROVEMENTS AT RETAIL AREAS	
4 FIRE PROTECTION	

ROOF INSULATION	R-X
WALLS ABOVE GRADE (MASS)	R-X
WALLS BELOW GRADE	NA
UNHEATED SLAB	R-X
SWINGING DOORS	U-X
NON-SWINGING DOORS	R-X

C402.3 FENESTRATION CALCULATIONS (30% MAXIMUM)		
NORTH WALL AREA		0 SF
NORTH WINDOW AREA		0 SF
EAST WALL AREA		0 SF
EAST WINDOW AREA		0 SF
SOUTH WAL AREA		0 SF
SOUTH WINDOW AREA		0 SF
WEST WALL AREA		0 SF
WEST WINDOW AREA		0 SF
TOTAL WALL AREA		1 SF
TOTAL WINDOW AREA		1 SF
PERCENTAGE		100.0%

TABLE C402.3 BUILDING ENVELOPE REQUIREMENTS		
	MINIMUM REQUIRED	PROVIDED
FIXED FENESTRATION	U 0.38	U0.XX
OPERABLE FENESTRATIONS	U 0.45	U0.XX
ENTRANCE DOORS	U 0.77	U0.XX
SHGC	0.40	0.XX
SKYLIGHTS		
U-FACTOR	U0.50	U0.XX
SHGC	0.40	0.XX

CHAPTER 7: FIRE AND SMOKE PROTECTION				
TABLE 705.8 - MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION				
15'-0" TO LESS THAN 20'-0"	UP/S	75%		
20'-0" TO LESS THAN 25'-0"	UP/S	NO LIMIT		
FIRE SEPARATION DISTANCE TO PROPERTY LINE: SEE SHEET				
ASSEMBLIES	REFERENCE	APPLICABLE	RATING	NOTES
FIRE WALL	706.4	NO	3-HOUR	
FIRE BARRIER	707	YES	1-HOUR	OCCUPANCY SEPARATION PER T508.4
FIRE PARTITION	708	YES	.5-HOUR	UNIT DEMISING PARTITIONS AND CORRIDOR WALLS PER 708.3 EXC. 1 AND 2
SMOKE BARRIER	709	YES/NO	X	X
SMOKE PARTITION	710	NO		
HORIZONTAL	711	YES	.5-HOUR / 1-HOUR	FLOOR/CEILING SEPARATION BETWEEN MIXED OCCUPANCIES PER 711.2.4.1 AND DWELLING UNITS PER 711.2.4.3 EXC. 1
SHAFT ENCLOSURE	713	YES	1-HOUR	
SECTION				
707.3.1	SHAFT ENCLOSURES CONSTRUCTED AS FIRE BARRIERS			
713.4	1-HOUR LESS THAN FOUR STORIES CONSTRUCTED AS FIRE BARRIERS OPENINGS PROHIBITED OTHER THAN THOSE SERVING THE SHAFT			
707.3.4	EXIT PASSAGEWAY THE FIRE-RESISTANCE RATING OF THE FIRE BARRIER SEPARATING BUILDING AREAS FROM AN EXIT PASSAGEWAY SHALL COMPLY WITH SECTION 1024.3			
707.3.10	HORIZONTAL FLOOR ASSEMBLIES (TABLE 707.3.10)			
708	FIRE PARTITIONS OCCUPANCY SEPARATIONS 1-HOUR PER T508.4 DEMISING PARTITIONS BETWEEN APARTMENT UNITS AND CORRIDOR PARTITIONS ARE REQUIRED TO HAVE 1/2-HOUR FIRE-RESISTIVE CONSTRUCTION WITH AN AUTOMATIC SPRINKLER SYSTEM PER SEC. 903.3.1.1			
711	HORIZONTAL ASSEMBLIES 711.2.4.1: OCCUPANCY SEPARATIONS 1-HOUR PER T508.4 711.2.4.3 EXC: FLOOR/CEILING SEPARATIONS BETWEEN DWELLING UNITS ARE REQUIRED TO HAVE 1/2-HOUR FIRE-RESISTIVE CONSTRUCTION WITH AN AUTOMATIC SPRINKLER SYSTEM PER SEC. 903.3.1.1			
713.13.1	REFUSE AND LAUNDRY CHUTE ENCLOSURES - 2-HOUR FIRE-RESISTIVE CONSTRUCTION - OPENINGS INTO THE SHAFT SHALL BE PROTECTED WITH 90-MINUTE PROTECTED OPENINGS PER SEC. 716 - OPENINGS INTO THE SHAFT SHALL NOT BE LOCATED IN A CORRIDOR - DOORS SHALL BE SELF OR AUTOMATIC CLOSING UPON THE ACTIVATION OF A SMOKE DETECTOR			
713.13.3	REFUSE AND LAUNDRY CHUTE ACCESS ROOMS A ROOM OR COMPARTMENT IS REQUIRED FOR ACCESS OPENINGS FOR A LAUNDRY OR REFUSE CHUTE - 1-HOUR FIRE RESISTIVE CONSTRUCTION WITH 45-MIN PROTECTED OPENINGS ARE REQ'D - FIRE BARRIER PROTECTION - DOORS SHALL BE SELF OR AUTOMATIC CLOSING UPON THE ACTIVATION OF A SMOKE DETECTOR PER SEC. 716.5.9.3			
713.13.4	REFUSE TERMINATION ROOM PROTECTION RATING EQUAL TO PROTECTION REQUIRED FOR ACCESS ROOM - 2-HOUR FIRE RESISTIVE CONSTRUCTION WITH 90-MIN PROTECTED OPENINGS ARE REQ'D - FIRE BARRIER PROTECTION - DOORS SHALL BE SELF OR AUTOMATIC CLOSING UPON THE ACTIVATION OF A SMOKE DETECTOR PER SEC. 716.5.9.3			
713.14	ELEVATOR HOISTWAY 1-HOUR ASSEMBLY PER 713.4			
TABLE 716.5	FIRE DOOR PROTECTIVE OPENINGS FOR 1-HOUR ASSEMBLY RATING, 90-MINUTE PROTECTIVE OPENINGS - EXIT STAIRS / ELEVATOR SHAFTS / REFUSE SHAFTS/REFUSE ACCESS ROOMS FIRE PARTITIONS - 1/2-HOUR CORRIDOR PROTECTION REQUIRED FOR CORRIDORS IN GROUP R OCCUPANCIES, 20-MINUTE PROTECTED OPENINGS - 0 HOUR CORRIDOR PROTECTION REQUIRED FOR GROUPS A, S AND B			
716.5.3	DOOR ASSEMBLIES IN CORRIDORS - TESTED PER NFPA 252 OR UL 10C (WITHOUT THE HOSE STREAM TEST) - VIEWPORTS ALLOWED PROVIDED 1" MAXIMUM DIAMETER WITH 1/4" THICK GLASS AND ENCLOSED IN METAL			
718.2	FIREBLOCKING IN WALLS - REQUIRED AT CONCEALED SPACES IN DOUBLE STUD WALLS VERTICALLY AT FLOORS AND HORIZONTALLY AT 10'-0" INTERVALS MAX. - MINERAL WOOL OR GLASS FIBER BATT INSULATION			

CHAPTER 6: TYPES OF CONSTRUCTION		
TYPE IIIB - NONCOMBUSTIBLE CONSTRUCTION (TABLE 601)		FIRE RESIST. RATING
PRIMARY STRUCTURAL FRAME		0-HOUR
BEARING WALLS	EXTERIOR (TABLE 602)	2-HOUR
	INTERIOR	0-HOUR
NON-BEARING WALLS AND PARTITIONS	EXTERIOR (TABLE 602)	0-HOUR / 1-HOUR: SEE SHEET
	INTERIOR	0-HOUR
FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS		0-HOUR (1-HOUR PROVIDED)
ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS		0-HOUR
SECTION		
TABLE 602	EXTERIOR WALL FIRE RESISTANCE RATINGS 10</= X < 30'-0" GROUP B, M, R = 1-HOUR FIRE RESISTIVE	

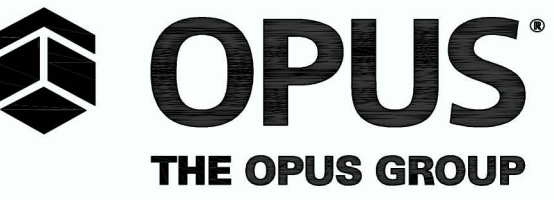
PROJECT DESCRIPTION	
THIS PROJECT IS A THREE-STORY LOW RISE, MIXED-USE BUILDING THAT INCLUDES 117 APARTMENT UNITS AND RETAIL. IT IS LOCATED ON W. 23RD STREET IN LAWRENCE, KS. THE PROJECT WILL INCLUDE SURFACE PARKING, APPROXIMATELY 8,800 SF OF RETAILS AND INTERIOR AMENITIES THAT ARE LOCATED ON LEVEL ONE. THE AMENITIES INCLUDE AN EXERCISE ROOM, OUTDOOR GRILLING AND SEATING AREA, AND A POOL.	
TYPE 'A' UNITS	
APARTMENT UNIT BREAKDOWN	
STUDIO	6
ONE BEDROOM	16
TWO BEDROOM	44
THREE BEDROOM	2
FOUR BEDROOM	49
TOTAL	117 APARTMENT UNITS

APPLICABLE CODES		
BUILDING	2015	INTERNATIONAL BUILDING CODE w/ CITY OF LAWRENCE AMENDMENTS
ENERGY	2015	IECC 2015 WITH CITY OF LAWRENCE AMENDMENTS / ASHRAE 90.1-2013
ACCESSIBILITY	2009	ICC ANSI A117.1-2009
ELECTRICAL	2014	NFPA 70, NATIONAL ELECTRICAL CODE w/ CITY OF LAWRENCE AMENDMENTS
MECHANICAL	2015	INTERNATIONAL MECHANICAL CODE w/ CITY OF LAWRENCE AMENDMENTS
FIRE / LIFE SAFETY	2012	INTERNATIONAL FIRE CODE w/ CITY OF LAWRENCE AMENDMENTS
PLUMBING	2015	INTERNATIONAL PLUMBING CODE w/ CITY OF LAWRENCE AMENDMENTS
ACCESSIBILITY	2010	AMERICANS WITH DISABILITIES ACT (PUBLIC AND COMMERCIAL SPACES)
ELEVATOR	2010	ASME A17.1-2010
SAFE HARBOR		FHA ACCESSIBILITY GUIDELINES USING ANSI/A117.1 - 2003 AND 2009 (APARTMENTS) AND ADA (PUBLIC SPACES). THE MOST STRINGENT REQUIREMENTS BETWEEN FHA AND ANSI A117.1 WILL BE FOLLOWED.

CHAPTER 4: DETAILED REQUIREMENTS BASED ON USE & OCCUPANCY	
SECTION	
406.6	ENCLOSED PARKING GARAGES: GROUP S-2
406.6.2	A MECHANICAL VENTILATION SYSTEM IS REQUIRED IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE
406.6.3	AN AUTOMATIC SPRINKLER SYSTEM IS REQUIRED THROUGHOUT PER 903.2.10
420	RESIDENTIAL APARTMENTS: GROUP R-2
420.2	WALLS SEPARATING THE DWELLING UNITS SHALL BE CONSTRUCTED AS FIRE PARTITIONS PER SECTION 708
420.3	FLOORS SEPARATING THE DWELLING UNITS SHALL BE CONSTRUCTED AS HORIZONTAL ASSEMBLIES PER SECTION 711
420.4	AN AUTOMATIC SPRINKLER SYSTEM IS REQUIRED THROUGHOUT PER 903.2.8
420.5	FIRE ALARMS AND SMOKE DETECTORS REQUIRED THROUGHOUT PER 907.2.9

CHAPTER 5: GENERAL BUILDING LIMITATIONS				
AVERAGE GRADE PLANE = DATUM LEVEL ONE FFE = (EL. 100'-0")				
ALLOWABLE BLDG HEIGHT (TABLE 504.3)				
USE GROUP	CONSTRUCTION TYPE	AUTOMATIC SPRINKLER	HEIGHT IN FEET	
A, B, M	IIIB	S / 903.3.1.1	75	
R	IIIB	S / 903.3.1.1	75	
ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE (TABLE 504.4)				
USE GROUP	CONSTRUCTION TYPE	AUTOMATIC SPRINKLER	NUMBER OF STORIES	
A-3	IIIB	S / 903.3.1.1	3	
B	IIIB	S / 903.3.1.1	4	
M	IIIB	S / 903.3.1.1	3	
R-2	IIIB	S / 903.3.1.1	5	
ALLOWABLE AREA FACTOR (TABLE 506.2)				
USE GROUP	CONSTRUCTION TYPE	AUTOMATIC SPRINKLER	SQUARE FEET	ALLOWABLE AREA
A-3	IIIB	SM / 903.3.1.1	28,500	33,972
B	IIIB	SM / 903.3.1.1	57,000	67,944
M	IIIB	SM / 903.3.1.1	37,500	44,700
R-2	IIIB	SM / 903.3.1.1	48,000	57,216

SEC. 508.4 SEPARATED MIXED OCCUPANCY MULTISTORY CALCULATION (L1)				
USE GROUP	TOTAL ALLOWABLE AREA	ACTUAL AREA LEVEL ONE	RATIO	
A-3	33,972	3,020	0.089	
B	67,944	934	0.014	
M	44,700	8,653	0.194	
R-2	57,216	38,336	0.67	
		TOTAL	0.967	
ALLOWABLE HEIGHT	75'-0"	PROPOSED HEIGHT		
ALLOWABLE STORIES	5 STORIES (FOR R-2)	PROPOSED STORIES		3
AREA FACTOR INCREASE- FRONTAGE (LEVEL ONE):		SECTION 506.2.4 - EQUATION 5-3		
USE GROUP	NS	NS x I(f)		
A-3	9,500	5,472		
B	19,000	10,944		
M	12,500	7,200		
R-2	16,000	9,216		
FRONTAGE INCREASE:		SECTION 506.3.3 - EQUATION 5-5		
I(f) = [F / P - 0.25] W / 30				
F = 1,369'		(BUILDING PERIMETER WITH MINIMUM 20' OPEN SPACE - WEIGHTED AVERAGE)		
P = 1,647'		(PERIMETER OF ENTIRE BUILDING)		
W = 29.74'		(WIDTH OF OPEN SPACE PER SECTION 506.3.2 - WEIGHTED AVERAGE)		
I(f) = [1,369/1,647 - 0.25] 29.74' / 30'-0"				
I(f) = [0.831 - 0.25] .991				
I(f) = .576				



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CONSULTANT

PROJECT

Mixed-Use
Development

LOCATION
Lawrence, KS

PROJECT NUMBER
31398000

ISSUE RECORD
PLANNING 01.02.2019

DATE

PROJECT MANAGER
Mark Winschel

DRAWN BY

CHECKED BY

REGISTRATION

FOR PLANNING
APPROVAL ONLY
NOT FOR CONSTRUCTION

SHEET TITLE
PRELIMINARY
CODE WORKSHEET

SHEET NUMBER

A.CODE